

**REMARKS**

The applicant respectfully requests reconsideration in view of the amendment and the following remarks. Support for newly added claim 6 can be found in the original claim 1 and example 9 for the bulk density. Support for newly added claim 7 can be found in the original claim 1 and example 11 for the bulk density and page 7, line 2 of the specification. Support for newly added claim 8 can be found in the specification at page 7, lines 1-5. Support for newly added claim 9 can be found in the specification at page 7, lines 1-5 and the examples for the range of the bulk density. Support for newly added claim 10 can be found in the specification at page 7, lines 1-5. Support for newly added claims 11 and 12 can be found in original claims 1 and 4. Support for newly added claims 13 and 14 can be found in the specification at page 7, lines 10-13. Support for newly added claim 15 can be found in claim 1. Support for newly added claim 16 can be found in the original claims 1 and 4. Support for newly added claims 17 and 18 can be found in the examples. Support for newly added claims 19 and 20 can be found in the specification at page 7, lines 1-5. Support for newly added claims 21 and 22 can be found in the specification at page 7, lines 26-30. Support for newly added claims 23 through 25 can be found in the specification at page 5, lines 25-28.

Claims 1-3 and 5-25 are now in the application. The applicant has four independent claims (claims 1, 5, 6 and 15). The applicant authorize the USPTO to charge \$200.00 for the extra four total claims over twenty to our Deposit Account No. 03-2775, under Order No. 14069-00102-US from which the undersigned is authorized to draw. The applicant also authorizes the USPTO to charge \$200.00 for the extra independent claim over three to our Deposit Account No. 03-2775, under Order No. 14069-00102-US from which the undersigned is authorized to draw.

Claims 1-3 and 5 are rejected under 35 U.S.C. §112, first paragraph as failing to comply with the written description requirement. Claims 1-5 are rejected under 35 U.S.C. §112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention. Claims 1-3 and 5 are rejected under 35 U.S.C. 103(a) as obvious over Böhme-Kovac et al. (US 5,387,626). Claims 1-3 and 5 are rejected under 35 U.S.C. 103(a) as obvious over Schlesiger et al. (US 2001/0025101). Claims 1-3 and 5 are

rejected under 35 U.S.C. 103(a) as obvious over Kiesewetter et al (US 6,943,247). Claims 1-3 and 5 are rejected under 35 U.S.C. 103(a) as being unpatentable over Böhme-Kovac et al. (US 5,387,626) taken in view of Girg et al (US 2004/0106729), Girg et al (US 5,432,215) or Weber et al. (US 2005/0282939). The applicant respectfully traverses these rejections.

The applicant thanks the Examiner for permitting the applicant to interview the above-identified application. Applicants' counsel points out that Examples 2 and 3 in the Declaration of 6 November 2007 represent a side-by-side comparison of Examples 9 and 10 of the Specification, which Examples embrace the invention as presently claimed. Examples 1 and 8 are comparative Examples that do not include the HPS (starch ether), nor the polyacrylamide. Example 5 is now deemed to be outside of the claim language. The applicant also discussed submitted additional cellulose ether blend claims along with process claims.

### **Rejections under 35 U.S.C. 112**

Claims 1-3 and 5 are rejected under 35 U.S.C. §112, first paragraph as failing to comply with the written description requirement. Claims 1-5 are rejected under 35 U.S.C. § 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention. The applicant believes that the claims as amended are in compliance with 35 USC § 112 first and second paragraphs. Claim 1 has been amended to make it clear that the bulk density is more than 40 g/l greater than the bulk density of a comparative cellulose ether wherein the comparative cellulose ether blend is made by the same process with the exception that the comparative process does not include the step of simultaneously milling and drying. As discussed in the declaration, the step of simultaneously milling and drying improves the bulk density. For the above reasons, these rejections should be withdrawn.

### **Claims 1-3 and 5 and Independent Claim 15**

Claim 15 is similar to claim 1. Claim 1 is a product by process claim. Claim 15 is similar to the process claim of claim 1. The subject matter of claim 15 would have been considered by the Examiner and does not require a further search and/or consideration.

With respect to claims 1-3 and 5 and independent claim 15, the applicant believes that their declaration establishes unexpected results over the prior art. At page 11, of the Office Action, the Examiner refers to applicant's examples 1, 5 and 8 stating that these examples establish that the range of 170-191 g/l is not inventive. It is pointed out that example 1 is not in scope of the applicant's claimed invention because there is no additive such as starch present. The amount of HPS is 0% in example 1. In example 5, the bulk density is 191 g/l, but there is no polyacrylamide present as is required by claim 1. Therefore, this would not be covered by the claimed invention. Example 8 is also not in scope of the applicant's claimed invention because there is no additive such as starch present. The amount of HPS is 0% in example 8. Therefore, the three examples referred to by the Examiner are outside the scope of the applicant's claimed invention.

The applicant was able to show in the declaration the criticality of simultaneously milling and drying the cellulose ether blend versus not milling the cellulose ether blend. The bulk density improved over 40g/l by adding this step. For the above reasons, these claims are allowable.

### **Independent Claim 6**

Independent claim 6 states,

A cellulose ether blend comprising:

- a) cellulose ether,
- b) from 1 to 10% by weight of an additive selected from the group consisting of starch, starch ether, guar, guar ether and xanthan, based on the cellulose ether in a dry form,
- c) water and

wherein said cellulose ether blend has a bulk density that is at least 254 g/l. (emphasis added)

Schinski (U.S. Patent No. 4,654,085) ("Schinski") was applied to the claims in the first office action. Schinski was also described in the applicant's specification at page 4, line 20. Schinski does not teach the applicant's claimed minimum bulk density. Schinski does not teach nor discloses conducting the milling and drying simultaneously. The applicant believes that the declaration previously submitted establishes that without conducting the milling and drying simultaneously, the bulk density is lower by at least 40g/l. For these reasons, the applicant does not believe that Schinski anticipates nor renders the applicant's claimed invention obvious.

Böhme-Kovac states that the starch ether component is an optional component that can be present in an amount from 0 to 20% by weight (see the abstract and col. 3, lines 37-53). The examples uses 0% starch ether for Examples A, B C, D and G. Example F uses 10% by weight starch ether along with 5% polacrylamide. Example E uses 15% by weight starch ether along with 5% polacrylamide. In addition, Böhme-Kovac requires the use of superabsorbent polymers.

There is no teaching or disclosure in Böhme-Kovac to have a high bulk density as is required by the applicant's claimed invention. Furthermore, Böhme-Kovac does not disclose nor teach conducting the milling and drying simultaneously which enables to achieve the applicant's claimed a high bulk density.

Schlesiger does not require the use of starch ethers as a mandatory element. As the Examiner has correctly pointed out, paragraph no. 0054, Schlesiger discloses that additives such as starch ethers can be present. Additives per se could be used prior, during or after the dry milling step and starch ethers are only disclosed *inter alia* as such additives. Furthermore, Schlesiger is silent about the amount of additives, particularly starch ethers.

It is acknowledged that Schlesiger discloses the production of cellulose ether having a broad range of bulk densities, particularly ranging from 0.3 to 0.5 g/l (see paragraph 0063). However, the applicant's claimed invention requires not only cellulose ether but also starch ether in minor amounts as additive.

Kisewetter is related to a building material which uses cellulose ether and starch additives. Kisewetter states that the starch ethers are optional and can be present in amount from 0 to 0.5 weight percent. Claim 6 requires that there is a minimum of 1% of the additive that can be a starch ether. This is over double the maximum amount taught by Kisewetter. For the above reason alone, Kisewetter teaches away from claim 6.

In addition, Kisewetter does not teach the applicant's claimed minimum bulk density. Kisewetter does not teach nor discloses conducting the milling and drying simultaneously. The applicant believes that the declaration previously submitted establishes that without conducting the milling and drying simultaneously, the bulk density is lower by at least 40g/l. For these reasons, the applicant does not believe that Kisewetter anticipates nor renders the applicant's claimed invention of claim 6 obvious.

#### **Independent Claim 7**

Claim 7 states,

A cellulose ether blend comprising:

- a) cellulose ether,
- b) from 0.5 to 8% by weight of an additive selected from the group consisting of starch, starch ether, guar, guar ether and xanthan, based on the cellulose ether in a dry form,
- c) from 0.05 to 1% by weight of polyacrylamide, based on the dry cellulose ether, said polyacrylamide being an anionic polyacrylamide having a sodium acrylate content of less than 20% by weight and a viscosity of less than 1000 mPas (as determined under conditions of 1% strength by weight in 10% strength by weight sodium chloride solution, at a temperature of 25°C),
- d) water and

wherein said cellulose ether blend has a bulk density that is at least 253 g/l. (emphasis added)

Claim 7 is further removed from Böhme-Kovac because claim 7 requires that component c) is

“from 0.05 to 1% by weight of polyacrylamide”.

This is outside of the preferred teaching of Böhme-Kovac (all the examples (A-G) use at least 5 or 6 % polyacrylamide).

Böhme-Kovac did not recognize the importance of the specific combination of from **0.5 to 8% by weight** of an additive selected from the group consisting of starch, starch ether, guar, guar ether and xanthan, based on the cellulose ether in a dry form and from **0.05 to 1% by weight of polyacrylamide**, based on the dry cellulose ether.

Furthermore as stated above, there is no teaching or disclosure in Böhme-Kovac to have a high bulk density as is required by the applicant's claimed invention. Furthermore, Böhme-Kovac does not disclose nor teach conducting the milling and drying simultaneously which enables to achieve the applicant's claimed a high bulk density.

As stated above, Schlesiger does not require the use of starch ethers as a mandatory element or **0.05 to 1% by weight of polyacrylamide** as is required by the applicant's claimed invention. Furthermore, Schlesiger is silent about the amount of additives, particularly starch ethers and the polyacrylamide.

The applicant's claimed invention requires not only cellulose ether but also starch ether in a specific amount as additive and that 0.05 to 1% by weight of polyacrylamide.

As stated above, Kisewetter states that the starch ethers are optional and can be present in amount from 0 to 0.5 weight percent in the building material. It is acknowledged that Kisewetter discloses that polyacrylamides can be used with cellulose ethers (col. 6, lines 1-7). However, claim 7 requires a specific amount of cellulose ether,

b) from 0.5 to 8% by weight of an additive selected from the group consisting of starch, starch ether, guar, guar ether and xanthan, based on the cellulose ether in a dry form,  
c) from 0.05 to 1% by weight of polyacrylamide. This specific range is not taught by Kisewetter. It is recognized that the applicant's minimum of 0.5% of the additive that can be a starch ether is the maximum amount that Kisewetter discloses for his building materials. Kisewetter does not recognize the applicant's specific amount of required ingredients that lead to a high bulk density.

In addition, Kisewetter does not teach the applicant's claimed minimum bulk density. Kisewetter does not teach nor discloses conducting the milling and drying simultaneously. The applicant believes that the declaration previously submitted establishes that without conducting the milling and drying simultaneously, the bulk density is lower by at least 40g/l. For these reasons, the applicant does not believe that Kisewetter anticipates nor renders the applicant's

claimed invention of claim 7 obvious. For the above reasons, these rejections should be withdrawn.

In view of the above amendment, applicant believes the pending application is in condition for allowance.

A one month extension fee has been paid. Applicant believes no fee is due with this response. However, if a fee is due, please charge our Deposit Account No. 03-2775, under Order No. 14069-00102-US from which the undersigned is authorized to draw.

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Respectfully submitted,

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